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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/838,535

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Byoung In Cho

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EXAMINER

GRAY, LINDA LAMEY

ART UNIT

PAPER NUMBER

1734

DATE MAILED: 11/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<p style="text-align: center;">Office Action Summary</p>	<p>Application No.</p> <p>09/838,535</p>	<p>Applicant(s)</p> <p>CHO ET AL.</p>	
	<p>Examiner</p> <p>Linda L. Gray</p>	<p>Art Unit</p> <p>1734</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003 and 27 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) 28-40 and 54-62 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-27, 42-47 and 49-53 is/are allowed.
- 6) ☒ Claim(s) 41 and 48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Detailed Action

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 41 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over English, Jr. (US 4,267,927) in view of Hager et al. (US 6,391,935).

Claims 41 and 48, English teaches a method of forming a product including applying to a layer of bubble pack 38 having a plurality of bubbles that extend outwardly from pack 38 and also have interstices between adjacent bubbles a composition 34 such that composition 34 at least partially fills the interstices of pack 38, and curing composition 34 which is elastic in that such is compressible (c 4, L 4-20; c 7, L 39-60; c 8, L 36-57; c 9, L 43, to c 10, L 36).

English does not teach polyurethane 34 to be viscoelastic.

Hager et al. teach using polyurethane as a cushioning material (c 1, para 1). The polyurethane is a specific viscoelastic polyurethane because such provide better low resilience (c 1, para 1).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided in English that polyurethane 34 be a viscoelastic one because Hager et al. teach using a viscoelastic cushioning of polyurethane to provide better protection using the lower resilience viscoelastic cushioning which would be desirable to English

to provide better protection for the materials protected using the pack 38/composition 34 combination should the composition be impact by an outside force.

Allowable Subject Matter

3. Claims 1-27, 42-47, and 49-53 allowed.

4. The following is a statement of reasons for the indication of allowable subject matter:

claims 1 and 6: English indicates curing composition 34 because such is hardened in place, however, English does not teach that the curing chemically bonds to pack 38 in that composition 34; **claim 11:** English does not teach applying pressure to composition 34 and pack 38 and applying to a surface of composition 34 heat of a temperature and a time sufficient to cure composition; **claims 16:** English does not teach that the curing forms a laminate of substrate 28, composition 34, and pack 38; **claim 22:** English does not teach applying a substrate to composition 34 after the layer of composition 34 is applied to pack 38; and

claims 1, 6, 11, 16, 22, 41, and 48: Tillotson (US 4,132,817) and Alderfer (US 2,726,186) do not teach using bubble pack and such would not have been obvious in that Tillotson (c 4, L 44-62) and Alderfer (c 3, L 10-14) use fabric instead and intend the foam to penetrate into the fabric.

5. As allowable subject matter has been indicated, Applicants' reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

Response to Applicants' Remarks

6. In view of Applicants' remark that English does not recite the polyurethane to be viscoelastic, a new grounds of rejection has been applied.

Conclusion

7. Any inquiry concerning this communication or earlier communications should be directed to Examiner Linda L. Gray at (703) 308-1093, Monday-Friday from 6:30 am to 3:30 pm. The fax number is (703) 872-9306.

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November 19, 2003

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Linda L. Gray
LINDA GRAY
PRIMARY EXAMINER